Matthew Shultz

Resources Collection Assignment

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| **Resource Title:**  **Carl Sagan’s “Cosmos”** | Description & Summary: A television series from the early 1980’s that explores many different aspects of science, including the origins of life and a perspective of our place in the universe. It offers an easily accessible, and entertaining way for us to introduce science to our students without going to Bill Nye videos.  Specific Content Area: Mostly Astronomy but it does cover other topics such as Astrophysics, Biology, and even has some profound Philosophical aspects to it.  Appropriate Grade Level(s): I would say this is appropriate for all Secondary level students, middle school and High School.  Best use of/for this resource: Sometime in the first weeks of class show clips to get students interested in The Nature of Science.  Comments: Carl Sagan really made science approachable to a lot of people when “Cosmos” debuted. When it was produced we were in the middle of the Cold War, and a lot of people were scared that “Science” was just good for creating these doomsday devices. It may be very cheesy in today’s terms but Sagan was a genius who was perfect for what he did. My first experience with Cosmos was this <http://videosift.com/video/Carl-Sagan-Mashup-A-Glorious-Dawn-ft-Stephen-Hawking> and I have since watched the entire series and was entranced throughout the whole thing. |
| **Resource Title:**  **NPR’s Science Friday** | Description & Summary: Science Friday is a section of the National Public Radio talk show Talk of the Nation. It is broadcast every Friday afternoon from 2-4pm and consists of new discoveries in science and hosts many famous scientists to come and talk on air and to callers, including Jane Goodall. Once again it is an easily accessible way to introduce new science discoveries to our students, plus it is free.  Specific Content Area: It varies with each broadcast, but I have found that most of the time it focuses on Biology more than any other subject.  Appropriate Grade Level(s): It is hard to get any student under the age of 30 excited about talk radio, but the way that Ira Flatow discusses things with guests is very approachable by High Schoolers at least.  Best use of/for this resource: This is a very solid way of showing that science is a constantly evolving beast, with new discoveries being made every week.  Comments: It is a two-hour program, and as a student I find it hard to listen to it every week, so I download the Podcast and it separates each of the stories into an individual thing. This allows for us teachers to find appropriate sections to share with our classes. |
| **Resource Title:**  **National Science Teacher Association** | Description & Summary: [www.nsta.org](http://www.nsta.org) is a great resourse for us teachers. It has plenty of free and cheap external resources such as peer-reviewed journals. It also allows us to connect to other teachers via a lot of different conferences and training sessions that draw quite a bit of their members.  Specific Content Area: All  Appropriate Grade Level(s): This is more of a resource for us teachers rather than students.  Best use of/for this resource: This is a resource we as teachers should use to help us plan out our lessons. There are other teachers out there wanting to help us succeed and teach our students to the best of our abilities and this website allows us to communicate.  Comments: I really like NSTA, but I really do not understand it very well, besides that it is a very powerful and useful source of information. |
| **Resource Title:**  **“The Physics of the Buffyverse”** | Description & Summary: “The Physics of the Buffyverse” is a book that takes sometimes confusing physics concepts and applies them to the “Buffyverse” that was created by Joss Whedon when he made the television shows “Buffy the Vampire Slayer” and its spinoff “Angel” using specific episodes and incidents in the shows. This is something that I fell in love with as a fan of the show because I understand the examples, but if somebody has no idea of the differences between characters in the show it could be confusing and hard to get the physics examples.  Specific Content Area: Physics  Appropriate Grade Level(s): Highschool  Best use of/for this resource: This is a great resource to pull out when you have some student who just is not understanding concepts like “work” or why energy in electron states is quantized. For the most part the examples given are very straight forward with diagrams and witty anecdotes from the author.  Comments: While I may use this source I do not recommend it for everyone. |